

10/540802

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 July 2004 (15.07.2004)

PCT

(10) International Publication Number
WO 2004/059644 A1

- (51) International Patent Classification⁷: G11B 20/12, 20/18, 7/00
- (21) International Application Number: PCT/IB2003/005696
- (22) International Filing Date: 1 December 2003 (01.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02080593.3 30 December 2002 (30.12.2002) EP
- (71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BLACQUIERE,

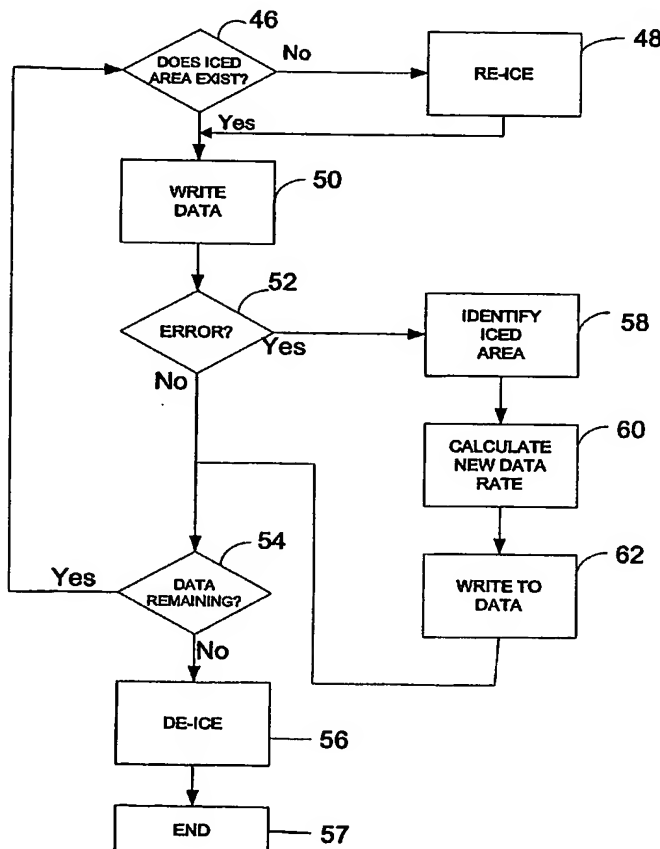
Johannis, F., R. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). SCHEP, Cornelis, M. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). STEK, Aalbert [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). JANSEN, Theodorus, P., H., G. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: DEGUELLE, Wilhelmus, H., G.; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: WRITING DATA TO AN OPTICAL DISC



(57) Abstract: When writing data to an optical disc with a constant linear velocity, and encountering a disc error, data is written into the defect management area of the disc without changing the rotational speed of the disc, or at least without changing the rotational speed of the disc sufficiently to maintain a constant linear velocity. This allows an increase in the rate at which data may be written to the optical disc. It also avoids or reduces the need for the rotational speed of the disc to be changed, which allows a further improvement in the time taken to write data to the disc. In order to continue writing data to the disc without changing the rotational speed, the data rate must be increased while writing to the defect management area. For this to be possible, the data must be written into an "iced" or unformatted part of the defect management area.

WO 2004/059644 A1